

26 A.
ADVANCED CIRCUITRY



P. O. Box 2847, Commercial Station, Springfield, Mo. 65803 417 862-0751

1. PGAD
2. DRAC 20
#100 4/2 CONT: Cig; ARW
E-0.82 d/h
MOD007152903

March 17, 1982

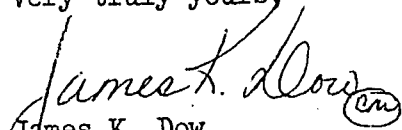
Mr. John Franke, Jr.
Regional Administrator
Environmental Protection Agency
324 E. 11th
Kansas City, Missouri 64106

Mr. Franke:

Enclosed is the specification for the plan closure of Litton's on-site lagoon as required by Section 265.112 "Closure; Admendments of Plan" of the Federal Register.

Please review and contact me concerning any modifications that you feel necessary.

Very truly yours,

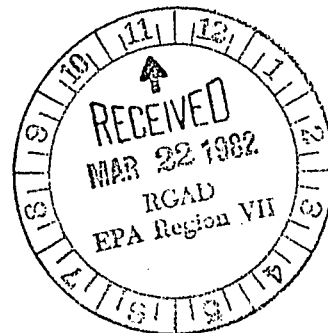

James K. Dow
Director Technical Services

JKD/cm

Enclosures



R00337285
RCRA RECORDS CENTER



- 265.93 Preparation and Evaluation and Response
See 265.9
- 265.94 Recordkeeping and Reporting

Subpart G - Closure and Post Closure

- 265.111 Closure and Post-Closure
A. Owner shall close facility in a manner to minimize all hazards.
- 265.112 Closure Plan
A. On or about March, 1982; the city sewer system will be available for partial hook-up and Litton will begin use for effluent discharge. At this time, Litton will split its discharge of effluent waters to A-pond and the sewer. At the present percolation rate, allowing for rain, and assuming a drop in the head pressure with the level, percolation will continue for approximately 300 days. This would put the start of disposal at about January 1, 1983. There is a possibility of earlier disposal if the city allows Litton to discharge from "A-pond" to the sewer in an effort to drop its level at a faster rate.
- B. Based on calculations approximately 1600 cu. yds. of sludge will have accumulated and will be removed to a hazardous waste site. This material will be removed with heavy equipment and handled per contract by O. H. Materials.
- C. Decontamination of equipment will include washdown within the pond itself and dewatering of waste through our filter press. This material will also be shipped via our normal process to the landfill per O. H. Materials.
- D. Actual closure will start in January and take approximately two months of excavation and loading time. Final closure will consist of grading over and seeding of the site.
- E. In lieu of the above, ACD is investigating methods for rendering the sludge non-hazardous. In the event ACD is successful, we would submit a modified closure plan.
- F. This plan must be submitted to the Regional Administrator 180 days before beginning of closure.

- 265.113 Time Allowed for Closure
A. Closure is to take place within 90 days of last receipt of wastes.
B. We may apply to Regional Administrator for longer closure time.
- 265.114 Disposal or Decontamination of Equipment
A. All equipment and structures used in closure shall be properly disposed of or decontaminated.
- 265.115 Certification of Closure
A. Upon closure, Litton shall submit to the Regional Director certification thereof signed by the operator and a professional registered engineer.

Subpart H - Financial Requirements

- 265.142 Cost Estimate for Facility Closure
A. Litton has developed closure costs for facilities of \$200,000 per contract.
B. Costs to be updated each year using an inflation factor derived from the Annual Implied Price Deflator for GNP.

Subpart K - Surface Impoundments

- 265.222 General Operating Requirements
A. Operation of lagoons shall be maintained 2 feet below runover.
B. All dams, dikes, and walls shall have grass covering.
C. Operating level shall be recorded daily.
D. Dikes, walls, and vegetation shall be inspected for leaks, deterioration, or failure weekly.
- 265.228 Closure
A. Litton shall remove:
1. Standing liquids
2. Waste and waste residue
3. Underlying and surrounding contamination soil

J. H. Materials Co.

Emergency Response and Environmental Restoration

Regional Offices:

Ottawa, Illinois
Atlanta, Georgia
Washington, D.C.

P.O. Box 551
Findlay, Ohio 45840
Telephone (419) 423-3526
1-800-537-9540

January 26, 1982

Mr. George Copeland
Facilities Manager
Litton Advanced Circuitry
4811 West Kearney
Springfield, MO 65803

Dear Mr. Copeland:

For this project, we recommend using our Sharples P 5000 Horizontal Super-D. Canter as the most cost-effective method of disposing of the pond's sludge contents.

Laboratory tests on samples provided by Litton indicated that the original material containing 10% solids (1 part solid - 9 parts water) could be readily centrifuged. Centrifugation resulted in products containing 50% solids (1 part solid - 1 part water) and a clear supernatant liquid (8 parts water).

Based on past experience, this 50% solid material plus 25% fly ash, or lime, should easily meet landfill requirements for a solid material.

Based on your estimate of 1800 cubic yards, we would pump sludge from the bottom of the lagoon at 80 gallons per minute. We would operate 12 hours per day, with the centrifuge on line 10 hours per day, and complete the pond pump out in about 12 days.

Assuming no further treatment of the supernatant liquid is called for, the liquid would be sent to sewer. The solids would be mixed with 25% fly ash, by weight, (or lime) and loaded into a lined and sealed truck, provided by others, for transportation to the disposal site. All of the above would be done by personnel wearing suitable protective equipment.

This project would take an additional five days for mobilization set up, decontamination, and demobilization, of equipment.

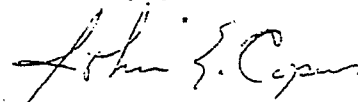
Based on the above, we estimate costs as follows:

Equipment	33,992
Personnel	41,416
Disposal - 400 tons of material (25% fly ash) @ \$130/ton (trans. & disp.)	52,000
Fly ash, 76 tons @ \$20/ton	1,500
Miscellaneous Disposables	<u>2,500</u>
	131,408
Contingency at 10%	<u>13,140</u>
	<u>\$144,548</u>

We require a 440 volt 400 amp electrical connection to operate the centrifuge. The 400 amp load is the starting current required to bring the centrifuge up to speed. The running current will be significantly less. If necessary, we, or Litton, can supply a portable electrical generator to operate the centrifuge.

Actual work will be performed on a time and material basis.

Sincerely yours,


John Copus

JC/eb